

AMENDMENTS IN THE CLAIMS

A2 1. (original/currently amended) A communication device ~~Device~~ for transferring data between two ~~workstations connected~~ devices coupled to a network, said communication device comprising:

~~characterized in that it comprises means for distributing said data among a plurality of links of said network~~

a dual-port memory for storing data;

a high-speed interface for transmitting said data between a first device and said dual-port memory, wherein said high-speed interface communicates data at an initial rate;

a plurality of low-speed interfaces, each connected to a respective one of a plurality of links to said second device, for transmitting data from said dual-port memory to said respective one of said plurality of links at one of a plurality of data rates, wherein at least two of said plurality of data rates are unequal and are fractions of said initial rate, all said fractions being capable of reduction to a common denominator and at least one of said fractions being irreducible; and

a controller for controlling said memory and said interfaces and for monitoring a data rate of said data between said memory and said plurality of links, wherein said controller includes means for cyclically distributing data to be communicated from said memory to said second device among said low-speed interfaces, such that each of said plurality of low speed interfaces receives a number of consecutive units of said data equal to the numerator of its associated fraction.

2.-6. (cancelled)

7. (currently amended) The communication device of Claim 1, wherein ~~Device according to claim 4, characterized in that~~ at least one of the set of said high-speed interface and said plurality of low speed interfaces comprises means for establishing a connection with a modem.

8.-9. (cancelled)

A2
10. (currently amended) The communication device of Claim 1, wherein Device according to claim 9, characterized in that, said high speed interface further comprises means for receiving said data at an said initial rate, wherein said initial rate is equal to the a sum of said plurality of data the rates at which low speed interfaces receive from the network, two at least of said low speed interfaces run at different rates.

11. (currently amended) The communication device of Claim 10, wherein Device according to claim 10, characterized in that, each said low speed interface running at a rate which is a fraction of said initial rate, all said fractions having a common denominator and at least one of said fractions being irreducible, the data flow is cyclically distributed among said low speed interfaces in such a way that each low speed interface receives a number of consecutive bytes from said flow equal to the numerator of its associated fraction. at least two of said data rates are equal.

12. (currently amended) The communication device of Claim 1, wherein Device according to claim 9, characterized in that at least one of said low speed interfaces comprises means for establishing a connection with a modem. said initial rate equals a sum of said plurality of data rates.

13. (currently amended) The communication device of Claim 1, wherein Device according to claim 12, characterized in that said high speed interface comprises means for transferring said data with a modem. said controller further comprises means for reporting said data rates.

14. (currently amended) The communication device of Claim 1, wherein Device according to claim 9, characterized in that:

[[-] said high speed interface further comprises means for transmitting said data at said initial rate, wherein said initial rate is equal to a sum of said plurality of data rates and at least two of said data rates are unequal.

is provided for alternately transmitting other data from said workstation to said memory,

each said low speed interface is alternately provided for transmitting a part of said other data from said memory to said link,

said controller, in a second state, monitoring the data flow between said workstation and said plurality of links.

A3 15. (new) A computer program product in a computer-readable medium for transferring data between two devices coupled to a network, said computer program product comprising:

a computer-readable medium;

instructions on the computer-readable medium for storing data in a dual-port memory;

instructions on the computer-readable medium for transmitting, across a high-speed interface, said data between a first device and said dual-port memory, wherein said high-speed interface communicates data at an initial rate;

instructions on the computer-readable medium for regulating a plurality of low-speed interfaces, each of said plurality of low-speed interfaces being connected to a respective one of a plurality of links to said second device for transmitting data from said dual-port memory to said respective one of said plurality of links at one of a plurality of data rates, wherein at least two of said plurality of data rates are unequal and are fractions of said initial rate, all said fractions being capable of reduction to a common denominator and at least one of said fractions being irreducible; and

instructions on the computer-readable medium for cyclically distributing data to be communicated from said memory to said second device among said low-speed interfaces, such that each of said plurality of low speed interfaces receives a number of consecutive units of said data equal to the numerator of its associated fraction.

16. (new) The computer program product of Claim 15, wherein at least one of the set of instructions for transmitting across a high-speed interface and instructions for regulating plurality of low speed interfaces comprises instructions for establishing a connection with a modem.

17. (new) The computer program product of Claim 15, wherein said instructions for transmitting across a high-speed interface further comprise instructions for receiving said data at said initial rate, wherein said initial rate is equal to a sum of said plurality of data rates.

18. (new) The computer program product of Claim 17, wherein said transmitting instructions further comprise instructions for transmitting when at least two of said data rates are equal.

A3

19. (new) The computer program product of Claim 15, wherein said transmitting instructions further comprise instructions for setting said initial rate equal to a sum of said plurality of data rates.

20. (new) The computer program product of Claim 15, wherein said operating instructions further comprise instructions for reporting said data rates.

21. (new) The computer program product of Claim 15, wherein:

said instructions for transmitting across said high-speed interface further comprise instructions for transmitting said data at said initial rate, wherein said initial rate is equal to a sum of said plurality of data rates and at least two of said data rates are unequal.

22. (new) A method for transferring data between two devices coupled to a network, said method comprising:

storing data in a dual-port memory;

transmitting said data across a high-speed interface between a first device and said dual-port memory, wherein said transmitting further comprises transmitting across said high-speed interface at an initial rate;

operating a plurality of low-speed interfaces, each connected to a respective one of a plurality of links to said second device, for transmitting data from said dual-port memory to said respective one of said plurality of links at one of a plurality of data rates, wherein at least two of said plurality of data rates are unequal and are fractions of said initial rate, all said fractions being capable of reduction to a common denominator and at least one of said fractions being irreducible; and

controlling a data rate of said data between said memory and said plurality of links, wherein said controlling includes cyclically distributing data to be communicated from said memory to said second device among said low-speed interfaces, such that each of said plurality of low speed interfaces receives a number of consecutive units of said data equal to the numerator of its associated fraction.

23. (new) The method of Claim 22, wherein at least one of the set of said transmitting and said operating step further comprise establishing a connection with a modem.

A3
24. (new) The method of Claim 22, wherein said transmitting step further comprises step of receiving said data at said initial rate, wherein said initial rate is equal to a sum of said plurality of data rates.

25. (new) The method of Claim 24, said transmitting step further comprises transmitting wherein at least two of said data rates are equal.

26. (new) The method of Claim 22, wherein said transmitting step further comprises transmitting at an initial rate equal to a sum of said plurality of data rates.

27. (new) The method of Claim 22, wherein said controlling step further reporting said data rates.
